

1908

Bering Id

D.

July 17. a.s. Reb ~~Reef~~ Kissa

733 otm	8-53; 9, 110; 10, 138, 11, 211; 12, 161; 13, 50; 14 62 , 10 st.	Reef 418
Total dinner	2537.	Kiss. 315
Pikal	13	
malki	1738	733 hol.
gordnik	23	
papa	35.	

July 21. o.s. Reef.

616 otm	8, 42; 9, 54; 10, 140; 11, 150; 12, 140; 13, 90 lbs.
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Total dinner 2141

Jake. 8	
Malki 1936	616. hol.
Gord. 14	
Papa 67	

July 23 a.s. ~~24~~ Kis.

207 skins. 7-9; 8, 35; 9, 40;
10, 27; 11, 31; 12, 50; 13, 20;
~~14, 5 lbs.~~ 16, 5 ot.

Total 1047 skins

Sik. 7 }
Musk. 779 } 217. hot.
Gor. 9
pups 35

July 25 a.m. Araf.

875 skins. 7 none; 8, 56;
9, 107; 10, 194; 11, 246;
12, 114; 13, 103; 14 lbs 60 ot.

Total skins 3064
Sik. 11 }
Musk. 2014 } 875. hot.
Gor. 5
pups 159 }

Bering Is.
1908
8061

July 27 05. Kissatchi
189 skins. 7 none; 8 lbs 10
9, 30, 10, 60; 11, 48; 12, 11;
13, 20; 14 lbs. 10.

Total down 1395.
Sik 4
Makki 1138 } 189 lbs
Gord. 5
pups. 63.

July 21 05. Ref.
532 skins ^{11/2} 7 lbs 25; 8, 100;
9, 100; 10, 80; 11, 90;
12, 36; 13, 40; 14 lbs. 61st.
Total down 2789
Sik. 5
Makki 2077 } 532. lbs.
Gord. 74
pups - 104

July 27th 05. Kissatchie

189 skins.

7 none; 8 lbs 10.

9, 30; 10, 60; 11, 48; 12, 11;
13, 20; 14 lbs. 10.

Total driven 1395.

sk. 4

Meat 1138

} 189 lbs.

Gord. 5

pups. 63.

July 27th 05.

Ref.

532 skins.

7 lbs 25; 8, 100;

9, 100; 10, 80; 11, 90.

12, 36; 13, 40; 14 lbs. 61st.

Total driven 2789

sk. 5

Meat 2077

} 532. lbs.

Gord. 74

pups - 104

Family SAL.

The

FOUR-LEGGED
vomero-palatine
sphenoid in two toot

About thirty sp
family which in its
confined to Europe
India, and in North
resented by two spec
or terrestrial; perfect

For each day a special
document "Act" has to
be made out stating the
number of seals taken, the
name of the rookery and
other details. This is signed
by the Koak and by the
Marshman. To it is then
attached the receipt
"Rontantzia" of the com-
pany's representative.

Aug. 13 Arrived off North Ry,
Tuesday. Bering Islands, at 6 am.
The weather cloudy, and
a stiff SW blowing.
After breakfast went
ashore with my cameras
to photograph and see what
could be seen.
The first thing that
struck me was the diminution
in the number of seals on
the "sand" of the Ry. The
land end of it has shrunked
up; the line of seals across
it dividing it has disappear,
and the flock at the south east
corner has become entirely isolated.

2) Anchored in 7 fathoms; rocks of NW.
of Sintch-Kamen visible on the N. side
of it; Sintch K. At $85^{\circ}W$; Salomon $S.15^{\circ}W$.

(13) To show this difference I took two photos from my old station on the laundry of the salt house steps.

The next thing to attract my attention was the almost total absence of the old bulls. I do not believe there are a hundred left in the working. The "working organization" is evidently breaking up.

Next I noted that there was still quite a number of very small pups yet in company with their mothers and which have not yet "potted." I crept in close to the flock at the S.E. corner alluded to above

(13) and took a snapshot which I hope will show this feature. However, the clouds are low and dark, and the wind is howling mercilessly and shaking my camera so that I have but faint belief in any successful pictures. The point from which this last exposure (no. 86) was made, is somewhat nearer the breeding ground than the one whence G. made his successful picture of which he gave me a print. It is situated on the Ladigimoki peninsula.

These facts have also been noted by the natives and my observations are therefore confirmatory of theirs. They

(13) insist that females are still bringing forth young.

Afterwards walked down to Kirovchugay Ry. and took a photograph from the old Ma. T. It will show - if it shows anything at all - the same shrinking of the area of the breeding ground.

Returning I visited Silivarov's house and there I got a partial explanation of this shrinkage (which does not seem wholly due to the season) in the figures which he furnished as to the animals contained in all the drives since I left the North Ry. I am certainly very thankful that J. adopted my suggestion to record the

733	2537	1134
616	2141	2077
217	1047	2014
875	3064	779
189	1395	1436
<u>532</u>	<u>2789</u>	<u>1738</u>
<u>3162</u>	<u>12973</u>	<u>9178</u>
	<u>3162</u>	
	<u>9811</u>	

(13) number and kind of seals turned away at the killing grounds. I copied the figures (in auto) of which the following is a summary:

From July 29 to August 12 (n.s.) there has been 6 drives, in which 3162 animals have been killed. But there were culled on the killing grounds out of a total of 12973, or nearly 13000 animals driven, or to put it otherwise, 9811 were rejected out of this above total. But the most significant fact is that of these rejected ones no less than 9178 were females! Just think of it: in order

(13) to get obtain a little over
3000 bachelors it was
necessary to drive off over
4000 females! The excuse
for this is that in as much
as the bachelors do not
haul out separately any
more, it is necessary to
drive the females as well;
but it must not be over-
looked that even in the
old palmy days females
were plentiful in the drives,
although not to the same
extent as now.

Yet, it cannot be
emphasized too much: thus
far there is no mortality
visible among the pups.
Another feature of
the above figures is the

	424	326	63	
	990	486	280	448
1380		1400	360	963
2021		1650	270	1940
1932		1680	341	2651
650		1170	600	2368
140			260	1339
733	7847	10.7	70	
	733		217	840
	5120	5520	217	875
			740	799
	80	175		
270		800		
600		900		
528		800		
132		990		
262		432		
182		520		
		834		
				10.6

528	800	10.9
132	990	10.3
268	432	10.9
180	520	10.6
	834	
143) <u>2010</u>	<u>10.6</u>	<u>10.3</u>
<u>184</u>	<u>524</u>	<u>5471</u>
<u>120</u>	<u>532</u>	<u>37</u>
	<u>151</u>	<u>10.6</u>

This is still more remarkable when we consider the great weight of the skins taken. In four of the drives there was not a skin under 8 lbs., while the average is over $10\frac{1}{2}$ lbs.

Show the low weight of
the skins, the people killing
rats down to $4\frac{1}{2}$ lbs!
And yet there is no plenty
of yarlings there either!
But the same "scrapping and

(13) raking' of the rookeries
there as here. Surely, here
is a good deal of food for
speculation!

J. last night gave
me the following figures
as reported to him. Killed
at North Rookery, D.J. to
date: 5665 holushaki;
22 matki (accidentally, or
because injured); 11 yearlings.
On South Rookery, D.J. 324
skins.

During the entire forenoon
and part of the afternoon
the crew was busy taking
on board the salter skins,
first those that were
burnded and finally the
loose skins that are going
to be burnded on board as

(12) well as a number from the last skins which have to be resalted on board the "Kotrik". The skins are slid down a chute from the salthouse to the beach below. Here the natives load them upon their backs and carry them ^{out} to the water's edge on the rocks, where they are dropped and where the ship's crew take them and throw them into the boat.

A little after noon the "Popovi" was run steering east 6 or 7 miles to the north of us.

The work of taking in the skins was finished about 4.30 pm. but as the SW. was still blowing with unabated force, it was decided

(13) not to go round to the

villages this evening but

to anchor up in a safer

place somewhat to the east

of the works. —

In view of the above

mentioned "scrapping" and taking

of the works for the last

killable seal - and particularly

in view of the fact that this

is not the first year that

it takes place, Mr. Chavas-

ski having this evening assured

me that it has been there

for every one of the last two

& three years - the question

which he propounded to me

this tonight certainly becomes

pertinent. : "Where do the

killable seals of ^{the} next year

come from?" If every bachelor

(13) Seal within sight has been killed, how is it then that 10000 to 30000 killable have been obtained the next year, besides the additions needed on the workers by employing fully the yearly loss of bull? And if ~~they~~ all were not killed, where were they in the mean time? To these questions I had frankly to confess that I did not know, but that I think it is a fair theory to assume that a certain percentage of bachelor seals always stay in the water, and that only ~~a~~ part of them haul out near the

(13) breeding ground. I pointed out that nowhere has separate hauling grounds of bachelor seals been found very far from the breeding grounds. It is not by any means necessary to suppose that this habit has been acquired[↑] of late years, of such it be; it is much more likely that it has always been so in view of the fact that there is no absolute necessity - or immediate benefit to the species - derived from the presence of all the immature individuals at or near the breeding grounds. On the other hand

(13) it would certainly be
beneficial for the pro-
tection of theabor
industry to yearly return
to the native locality, if
the habit was kept up
by a large percentage
of each yearly class of
immature seals. This
would then be an ar-
gument against the
proposition to try to
exterminate the seals
in order to exterminate
the seal question and the
pelagic sealing. It cannot
be done, as is also well
shown by the experience
on Tjuleny.

Aug. 14 The SW wind blowing with
Wednesday great force we were obliged
to lay to at our anchorage all
day. Passed the time reading
the latest newspaper - up to
June 22.

Aug. 15 The wind today having
Thursday moderated somewhat and
being more southerly we
left our anchorage for Nikolok
at 6.25 am. The swell, however,
was tremendous and it
was 11.30 am before we came
to anchor. The landing then
became the next problem,
but as we were anxious
to get ashore and at the
same time not wished our
things to get wet, we left
them behind, except my
camera box. Our boat consequently
by not being very heavy we

(15) landed dry on the reef, and I was once more "at home". There is nothing to be done, however, for the wind and swell continuous or nothing can be brought ashore, and as the next trip is to be with the "Kotik" to the South Rookery, B.I., I will have to wait till she has unloaded her goods.

When I mentioned this evening to Mr. Kluge that I had stranded a number of very young pups on the North by. the other day, and at the same time expressed the opinion that this is nothing unusual, but that now the rookeries and the seals are under constant and

(15) anxious inspection many things appear unusual and new simply because no attention had been paid to the questions in the years of plenty. Mr. Kluge at once agreed in so far as this point is concerned, for it was his own observation on Tjulennij ^{some} four years that ^{some} pups were regularly born very late in the season.

Aug. 16 The "Kotik" has been busy Friday unloading and I getting ready for the trip tomorrow to Potsdzhornaja Rovnya. We are ready to start in the morning.

Weight myself - 148 $\frac{1}{2}$ lb.
(4蒲式英 4 $\frac{1}{2}$ lbs Run.)

Had a good Aurora bath 1pm going to bed,-

T.D.
Sokotra

Kinburn strand 54°57'
waterfall.

Aug. 17 Bright and early I went Saturday on board the "Kotik" and after breakfast we started for Polidimaja Rookery, in front of which anchor was dropped about 11.15 am.

I had hardly time to greet my old friend Ni-Kanor Grigoriev, the "Professor," as we used to call him, now starthma of this rookery, as the Captain only gave me to 2.30 pm to get through with my work. Consequently, I started at once for the rookery with my camera and plane table.

The breeding ground - for I saw no holustieki - is the most little patch, with not a single siskatch at the

(17) present. It was said in the village that there had only been one skatch this season, but Mikawo informed me that so was not literally the case, the number having been five. Thus far he has secured 405 skins.

I was able to get very close to the ground which were occupied by mothers and pups only. A good many of the latter were in the water - where of course quite a number of females also - but there was also quite a large lot of smaller pups right at the ^{posterior} ~~upper~~ edge of the herd. I was again impeded, as before in Kickatowaja, by the action of the females and young

(17) when the females haul up
from the water and go in
search of the young to be
~~nurse~~^{take} her. The ground is here
so small that it is a
comparatively easy task for
the mother to find its young,
and I consequently observed
several dripping wet cows
nursing pups. The mothers
in coming out of the water
made straight for the pod
of pups and the usual
performance of pups rushing
up and ~~set~~ upon being
met at critically rapid
and the search continued was
gone through. So much is
absolutely certain, the
females do not nurse
the pups promiscuously.

(17) I am thoroughly convinced by what I have seen that the mother wades considerable distances and spends ^{much} considerable time in searching for her own individual child. Whether a mother who had searched in vain for a long time and whose milk was passing her very strongly might not finally give in to the importunities of a particularly hungry pup is something which a question which it will probably never be possible to answer definitely, but I think such cases are the exceptions; the rule is certainly the reverse.

(17) ^{to the east of the waterfall}
The rookery is situated
on a steep pebbly beach
at the western third of a
wide curving bay, outside
of which there are a
number of rocks. The
trading seals and their pups
occupied a small semi-
circular area on the
beach. A number of them
were also seen upon the
rocks to the westward.

After the inspection of
this rookery, which certainly
looked quite different
13 years and 4 days ago
(Aug. 21, 1882) when I estimated
the number of seals to be
20000 to 25000, ~~a sum~~ (see
Deutsch.-Geogr. Bl., VIII, 1885, p. 238)
a number certainly too great

(17) but on the other hand
description of a condition
widely different from the
present handful of seals—
I continued my walk
along the shore until I
reached Steller's Arch, of
which I made several
photographs, finally returning
the same way to the landing
place.

I tried ~~too~~ very hard
to get a photograph of the
arch from exactly the same
stand point as my sketch,
(published in *Naturh. Journ.
Ak. Berl.*), but in vain. The
eye is much more wide
angled than the lens, and
I had to stand my camera
at a much greater distance

(17) in order to get the entire arch in.

Lindquist at noon
got a very good observation
~~by the waterfall~~ for latitude which he
determined to be $54^{\circ}57'N.$

After supper we arrived
in Guan again, where we
found H.B.M.S. "Propriate"
at anchor next to the "Fakub.
'Fakub'" left shortly afterward,
and so did the "Kotik".

This was the last trip
of the "Kotik" to the island
~~before~~ until she finally touches
here before on her way to
San Francisco, probably
about the 8th of September.
As I have not been able
to make any other man-

(17) genuine I had to answer
Mr. Malarowski yesterday
when he asked me, that
I should probably have to
go with him till San Francisco,
although his date is
earlier than I could wish
it. If I do I shall be
unable to settle for myself
the question whether her
is any unusual mor-
tality among the pups in
fall or the workers here.
It has been impossible to
approach the captain of
the "Jabut" as if and he do
not seem to be an speaking term.
"Jabut" is therefore out of
the question. Tomorrow I
shall have to put on civilized
clothes again and call on

(17) the captain of the "Porpoise".

Something may turn them

up. We shall see!

Aug. 18 When the service flag on
Sunday board the "Porpoise" was taken
down G. and I went on board
to call on the captain. The
reception of the "governor" of
the islands was as ceremonious
as could be desired by the
most exacting. As we arrived
a line of red coated white-
helmeted marines presented
arms as well as when we
left, and as we were well
again in our boat the Russian
flag was saluted with ^{some} ~~four~~
guns. No flirs on us!

We only saw the captain
and the first officer, both
very nice and agreeable

(18) gentlemen. The wait lasted

almost an hour. The "Porpoise"

sailed about 6 pm.

In the afternoon I finished

up the sketch map I made

yesterday of the curious

the Bludzomaya Rocks.

Today I witnessed scenes

which I never believe I

shone on on Bering Island,

and which would have

been impossible 12 years

ago. Then the natives were

forbidden to make "bar"

of sugar, and it was not

allowed to sell them liquor.

On special occasions, or as

a particular premium for

extra exertions or services

I used to treat them to

a drink, or occasionally

(18) a bottle. Since then things
have changed. Who is respon-
sible for the abolition of
that wholesome law I do
not know, but whomever it
is, he has ruined the population
of this island. Now the
natives are allowed to
buy - individually and
collectively - as much
spirits as they can find
money to pay for. The
"community" imports it
by the whole sale, and on
the big holy days it is
divided up according to
"shares". I told me that they
took out for today 200 rubles
worth. It is big prozuik -
Prozagorsk - the transfor-
mation - and all the ^{even} Bering

(18) Blaudz has been transformed into a drunkard baut, the Russian fashion of celebrating a church holiday. During the afternoon three men had to be arrested on account of their fighting. Hearing this the Starshina, Peter Bydutowski Jr., otherwise a quiet and meek man, in a ^{drunken} ~~crazy~~ yell rushed to G's house and told him that he had no business to arrest these men and acted so wildly that he had to be locked up too, and will have to be starshina. And all this for this miserable cursed liquor.

Aug. 19 With plenty of rain and
wind outside this was an
ideal day for packing up,
and I have done nothing
else. Yet, I am not through.
The difficulty is not about
what to pack, for there is
very little to bundle up and
ship away. There have been
no opportunities for collecting.
My gun has not been out
of the car yet, except for
visiting. Birds are exceedingly
scarce, and moreover, when
skinned I find time to hunt
birds. The seals have had
the experience every time
the weather has permitted.
The difficulty therefore is not
the overwhelming quantity

(19) of the stuff, especially since
the natives bring nothing
in as I have refused to
promise to pay with alcohol,
the only thing which now-
days can drown them
but the trouble is that
I do not know exactly
how to pack the few things
I have - possibly just because
they are few. Then, in
addition, I do not know
yet exactly how and when
I am going to leave the
island. The "Totok" is expected
here on its way to San
Francisco any time between
the 6th and 10th of September.
There are two reasons why
I have not yet made up
my mind definitely to

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(19) go on her. First, there is one more important question to ^{investigate} settle here on the islands and that is whether there is any abnormal mortality among the pups on the workers late in fall, or not. Thus far there have been no indications of such a state of affairs, but it is too early yet to say for certain that there is no such mortality, or that there will be none. Second, I would like very much to return by way of Japan.

My disagreement with the captain of the "jakut" makes it inexpedient to attempt any passage by that route. The captain

(191) of the "Popovin", on the other hand, voluntarily told me that he could take me to Hakodate, when he leaves after October 6th - provided I be here on official business. This making the thing on exclusively and openly official causes me to hesitate, the more so since he ~~made~~^{intends} no definite or formal invitation, and I should not like it to request him to transport me. However, when he leaves the island on Thursday or Friday next, I will try to have him invite me to go with him to Petropavlovsk to take the "Kotuk" there. Till then I will defer making a

(19) final decision. I could easily leave the island now for there is nothing on the work here ~~does~~ to specially engage my attention at the present time, and were it not for the possibility of the extra mortality among the pups later on, I would not hesitate a ~~moment~~^{minute} in returning at the earliest possible moment. As I intend to make another inspection of North Arctey on Wednesday and Thursday next I will have to get my things packed, in case I should get the chance to go to Petropavlski, and they must be packed with that possibility in view. And

(19) here is where the difficulty lies.

I. this evening made mention again of the "so-called" "secret", that the naval guard which was stationed at Tjulenvij in order to protect the island against the poachers, on the contrary made common cause with them, 3000 skin being thus secured. Whether the thing is to be hushed up or not in St Petersburg, time will only show. This custom of stationing a naval guard of an officer with 20 men during the summer and fall dates from 1884.

Aug. 20 Finished packing, and
Tuesday, as the weather was decent
tried to do some photo-
graphing about the village,
but the mosquitos soon
drove me in. They were
awfully bloodthirsty and
very plentiful. There was
but little wind, and it
was warm for being Doring
Island, viz 55° F., so the
mosquitos had a grand
time while I had not.

Gribnitski mentioned
this evening that a species
of bat is now found at
the village, but that he had
failed thus far to get a
specimen. It was first found
a couple of years ago. It is
evidently introduced from

(24) Kauččukha in the fire
wood.

Upon inquiry I found
that the jātī village at
Sarygavan has been
raided and that only one
man, Vasilij Stepanof, now
keeps any gardens there.

All the gardens are now

as Frobolija.

Aug. 25 ^{In an afternoon snow a river 22° cm. deep.} The dog sledge appeared

Wednesday at the door at 10 am

and in a quarter of an
hour I was off. It was

a dense fog with prospects

of rain, but it looked

to me as if the north

wind might be clear. G.

however, remained behind.

The trip to Suryj was

(21) gone, but the driver very
and not very skillful, so
he managed to drop me
off the sledge just as we
entered the burning village.
The road was not so
wet as formerly so the
driver was more comfortable
for man than for beast.
He suspected there was
no fog on the north side,
though it was cloudy and
rather dark.

Kraaja Riba were
pushing their way up the
little streams and hundred
upon hundred were laying
dead already the entire
way. Took a couple of
photos which ought to
show it well, though I

(21) did not manage to photograph a scene with any extraordinary number of dead fish, as I did not wish to go far from the track.

Upon arrival at ^(about 3.15 pm) Limerick, I put up at the Company's house which I found even dirtier than before and made my dinner of hard tack and canned meat with tea.

And this is what Mr. Hause asks 75¢ a day for. There can be no doubt that he is going to charge me too much for board and lodging, but there I am helpless and will have to pay.

(21) Went at once to the rookery, but as the wind was bad had to watch and photograph from the distance only. The seals have now left the "sand" almost entirely, and most of the females are in the water. The pups are spreading, and a lonely scratch was seen here and there near the water's edge. On Sintachi Island I observed a single seal cholesterol among the seals.

From the reef I then went to Kisko-Tchernaya with the same results.

Females, and especially pups,

(21) now hawking out on all
the rocks in the water on
both sides of the rocky.
In the mean time
the "Pogwiz" had arrived
and anchored off the
rocky. A boy came
running to Kivtchaga to
inform me that a boat
had been landed and
that some of the officers
were on shore. I at once
returned and found the
captain with the doctor
had another officer who
was making inquiries
about the train tomorrow
morning. It was decided
to have it come off about
7 am. Much against my
protest, on account of my

(21) continue the captain
carried me off to the
hotel for dinner and to
stay over night. So spent
a very pleasant evening
and night in the captain's
cabin.

day 22 After having taken break-
fast on board, the captain
so I in one boat and officer
and petty officer to the
number of about 20 in another
went ashore about 7 am. and
brought the Haropena with
the natives waiting. Very
shortly after the whole
company, Indian file,
proceeded to the reef rocky
and in short time down
off nearly all the rocks
located on the reef itself.

(22) The whole place, after the
driv was over was com-
pletely razed, not a
shell left. The whole brady
ground, not located on
overhanging rocks - and it
was now low water - was
gone over and nearly all
driven off. The Englishmen
in boats and smoking at
a great rate enjoyed the
unusual sight immensely.

4
Down on the rocky
ground I was startled by
the great number of dead
pups. I was wholly un-
prepared for this, because
at the great distance from
which it has been nec-
essary to watch the mothers
here, the small bodies of the

(22) dead seals have not been noticeable; in fact, I do not see how in the binode they could, have been distinguished from sleeping ones. It was easy to distinguish them which were lying in a ^{high water} ~~low~~ margin of the water. These had evidently been washed ashore. A good many of them were in an advanced stage of putrefaction - some entirely flattened out and without hair. But an equal proportion had evidently died ^{more} recently being in good condition. There was another class of pup carcasses, viz those which were

(22) lying dead upon the
~~upper~~ higher portion of the
breeding ground, ^{my back from}
the water's edge. They
were mostly all in good
condition and appeared as
if they had died within a
few days.

When the seals were
driven off, as many of
the pups as possible were
allowed to escape into the
water, and they availed
themselves of the opportunity
offered to go off in large
flocks. But there was
a considerable number
of pups that stayed behind
nugly and which upon
our approach made but
feeble attempts at getting
away. Evidently something

(22) was the matter with them. Upon closer examination they were found to be very weak and their thin and pinched appearance was at once noticeable. They were starving. Their shoulder blades and ribs and hips were sticking out in strong contrast with the rounded and plump forms of those which scampred off with the others. Upon handling the ~~dead~~ carcasses, both in the wind row and on the higher ground the same state of affairs was apparent: extreme leanness, and emaciation.

After the workmen had

(22) been completely cleared
I took my notebook and
walking along the beach
began to count the number
of dead pups, making a
distinction between those
that are in good condition and
those carcasses that were
in an advanced stage of
decay. I had gone about
half way round and
counted about 200 of
the former class and 150 of
the latter (last leaf of this note
book) when the charshua
arrived and said he had
order from the Krak, Sili-
vanof, to ask me to leave
the country at once. It
was evident later that
Siliwanof was merely because

(22) he thought the number of dead pups might in some way become charged against the management, for he tried to make the whole thing a small affair and explained to me that the number of dead pups was due to their being trampled upon by the orkatchi. But for those very good reasons this theory does not hold.
(i) In the first place, there are now very few orkatchi on the voleky at all, entirely too few to be able by any possibility to kill even a small fraction of the pups which have recently died.
(2) If this trampling upon

(22) caused the death of so many pups, how many should we not expect in a drive like the one today, where up hundreds upon ~~hundreds~~^{hundreds} are tangled upon, not once, but over and over again. Yet, not a single dead pup was found in the wake of the drive!

(3) This explanation does not account for the emaciated condition of the bodies of the dead ones.

Say the necessity of complying with the order to leave the works I could not finish my count. I am pretty positive, however, that the

(ii) following estimate is
not much out of the
way. I may preface it
by saying that the number
of dead bodies on the
east side appeared to be about
double that on the west
side.

Dead pups on west
side counted about 350
do. do. on east side
estimates 700
do. do. on high ground
about (estimated) 200
Total 1250

Without making any
allowance for bodies
overlooked as hidden
among the rocks etc etc
In walking off the
rockery I took from the all

(22) high ground I found 2 bodies which seemed quite fresh and ^{firm} which, therefore, it would seem possible to determine the cause of death. In lifting the second up by the flippers I was somewhat startled by finding it still gasping, but it was much too weak to give any sign of life when lying on the ground. I carried it up to the killing ground where the rest of the company had congregated, but the pup had died before I reached them. The other pup had apparently died during the night. I left the pups with the Rosaki's boy to carry to the house, and in reaching home I found that in his

(23) goal to serve me he had
already started to skin
them - local fashion - thus
spoilting them for specimens.
However, for my purpose of
a postmortem they were
all right. I took the ship's
doctor with me, Dr. Lloyd Thomas,
who on viewing the opened
bodies with me agreed that
death was due to starvation.
lack of food, starved to death.
There was not a trace of
fat left in the tissues under
the skin, nor in the muscles.
The extreme leanness of the
carcass was very noticeable.
Both of us, afterward, ^{convinced}
called special attention ^{upon} to the
plumpness of the arroz
jung as they appeared in the

(22) drin.

I satisfied myself, while on the walk, that the fresh ~~carcasses~~^{bodies} on the sand now were in the same condition, and the fact that they were thus thrown up on the beach by the water signifies but little, for we have had no severe weather as yet, and it is therefore impossible that ~~the~~ these pups could have been killed by any "surf rip". They did not live all.

There was another matter to which I called the special attention of the English gentleman while we were on the walk, viz the presence, and very

(22) ^{smelling} giving instance of
semi-fluid excrements on
the rocks and stones, particu-
larly mentioning that the British
Commissioners in their reports
had stated the worse to
be the ^{case} fact. In fact, the
foul matter was making
it very slippery in places,
and to it has added the
yellow clotted milk washed
up by the pups as they
were hurrying out of our
way.

A few of the pups have
assumed the gray coat, but
the great majority are still
black.

I was very anxious to
take a few photos of some
of the leading features of today's

(22) driv, but the weather
permits. In the morning
it was a foggy drizzle,
dark and disagreeable, and
in the afternoon it turned
into down-right rain. +50° F.
All I could do was to
make a few film snap
shots with my 3^½ (which
I could carry under my
rubber coat), during the
middle of the day showing
some incidents of the killing.
There were no joyous immensity
by the Englishmen, and I
believe almost every man
on board was given a chance
to witness at least the killing.
Capt. Francis R. Pitty
kindly offered to take me
round to St. Kolokpi tomorrow.

(22) and from there to Ropponal-
ski where he has to go
no later than the 24th. As
it was reported, however,
that there is fog in the
village today and as the
wind is southwesterly which
may make landing difficult
I had to decline the in-
vitation as I cannot go
to Ropponalski without my
things, which might be
necessary if he could
not land here in Gavam
tomorrow. Under these
circumstances I think it
is safer for me to take
dog-sledge tomorrow morning
early for the village, and
I have consequently ordered
one for 7 am. tomorrow.

(22) The drive was the ~~next~~
~~largest~~ of the season yielding
903 skins. No exact tally
of the escaping females etc
could be kept partly because
killing was going on in several
places at the same time,
partly because the former of
the many spectators who naturally
interfered with the count.
However, the drive did not
in this respect differ from
the preceding ones as fully
4000 animals were driven
off the rocky. Whole pods
had to be let go because
not a single holothurian was
among them. The average
weight was probably some-
what less than formerly,
but the skins were of very
good dye indeed.

(22) As usual with similarly
large drives of former years
the seals were driven in
squads of 200-300 and
not in one big body. On
the killing ground they were
again collected into two
large herds. The separating
out of the killing pods was
very quiet and deliberate
and not attended with the
same worrying of the whole
herd as was the case with
the drive I witnessed on
St. Paul, where the animals
had to be driven several
times into the lake to
cool off.

This enormous big

drive during which the

(22) whole breeding ground of
the big monkey was ^{thoroughly} swept
clean I suspect to be
due to the fact that the
^{have already} ~~men~~ received their share
— or the greater portion of it —
of the community payment
for the skins turned in this
season. The amount was
considerably below that of
any former year and
this wholesale effort is
evidently brought on by a desire
to add to the fund
to be finally distributed, as
otherwise many of the
inhabitants will run short
of what may now be fairly
termed as necessities of
life.

558 Some of the difficulties attending trawling with dogs

(22) was sadly exemplified tonight,
for as I was going the
change six plates in my
holders by the light of
my ruby lantern which
broke on the first dog sled
trip, I found that of the six
plates in the box, 4 were
broken into fragments and
2 thereby scratched so much
as to have become useless.
So I had to give up chan-
ging plates as I had
no others with me.

This evening a man
brought me a partial
skins of an Uria arctica.
Only the anterior part of
the head and the throat are
black; on the rest of the upper
part of the body there are

(22) a few scattering black feathers among the white ones. The wings are black irregularly marked with white both on coverts and quills, and almost symmetrically on the two wings; tail white. Iris brown; bill black; feet above clay colored, webs and toes dark brown. It was shot at Japadri ^{first} this evening, but the bill was shot off and it was too wet and dirty to be preserved.

Silivani brings me the following tally of the deer yesterday. It was evidently kept by some of the boys as I know S. did only attempt a count at the beginning of it. It is as follows:-

(22) S. Hatchi 8
Maki 294~~7~~8 } Total

Yarigs 181 } 4337

Pups 295 }

Holust. 905 }

I macker diet on the road.

Weight

lbs 7 — 4

8 85

9 139

10 215

11 203

12 179

13 28

14 52

905

However, the above
shows at any rate pretty
conclusively that my estimate
that our four animals

561

(22) our drive was accurate.

The proportion of females to killed males may therefore be taken as correct. It is interesting to note the somewhat unusual large number of sparrows, but after all, what a pitiful showing in this class! The weight is up to the former average notwithstanding my impression to the contrary which was based upon the returns of the earlier part of the killing.

Aug. 23 7 am. A last look at the Tuesday morning shows that the juncos and spgs have returned to the same place as before, the rookery looking today exactly as it did yesterday morning before the drive. I expand a plate

(27) but it is doubtful whether
it will show much.

Vasilij Bodnarevski, although
ordered to be with his dogs
at my door at 7, did not
show up and when at 9
I found that Ivan Bodnarev's
sled team had arrived from
Tsiarma, I engaged him
at once and off we went.
It had rained heavily during
the night and the roads
were consequently in a
frightful condition. The dogs
literally dragged me through
a continuous mud puddle
for more than twelve miles.
Add to this a nasty drizzle
and you may imagine how
uncomfortable a ride it was
especially as I had to fight

(23) off the ravenous mosquitos
with my mud begrimed
hands. Covered with mud
and blood - from the mosquitos -
I arrived in Gambell about
12.30 pm. via Ladiqinoak,
where I found 4 frame houses,
one roofed with sod, the
other shingled.

The pup carcass was
at once put in alcohol,
civilized dress put on and
the things packed and
made ready for departure,
for the "Popovia" was already
at anchor in the harbor.
Shortly after Dr. Thomas
arrived with the captain's
invitation to come on board
and go to Petropavloski. He
and I then made a call

(23) on Febnitski. I specially informed the latter of the number and condition of dead pups found yesterday on the rookery and suggested that he order a detailed count at the end of the season, which he promised to send me by the "jaket".

The captain also came ashore and at 5 with the officer I went on board the "Empire", where I was made as comfortable as a man can be on a vessel, and spent a very pleasant evening.

Augt 2 G. told me that it was the intention of making two or three more drags on the North rookery and expected to

(23) have about 2000 skins for
the "Totik" doorway, that
of late years the greatest catch
was made in August, as
the seals arrive so much
later. To this is to be
remarked, however, that the
greatest catch of 905 skins
yesterday was only due
to the extraordinary large
number of seals driven
off, and that there was
no greater proportion of
killable than earlier in
the season.

Aug. 24 The day passed pleasantly
Saturday on board and was spent in
reading, conversation and
and watching the races on
deck between the men gotten
up by the officers. The latter

(24) in the evening invited me to dine with them in the ward room.
The weather was moderate,
but cloudy and cold, I was
perfectly comfortable.

Aug. 25 Cloudy ^{and foggy} and very small,
Sunday. but fair wind. Sighted
land about 1 pm., but
did not get any good
view of the mountains
which were mostly enveloped
in fog and clouds. Trudra
Bay entrance and the
harbor were the same
glorious landscape as for-
merly. Upon coming to
anchor went immediately
on board the "Flora", but
returned late with Capt. Bell
and had supper on board the
"Porpoise" with him and dried
meat and my old friend

(25) Capt. Grisby of the "Bobrik" which we found at anchor next to the "Kotik". The "Jabut" is also here.

Grisby reports about 1300 miles from Tjilengi. Trade was numerous and Nakashiki is about the proportion of 1 to 40.

Nakashiki is not quite well yet. I told him of Gribnitski's intention to visit Copper Island in the "Jabut" and to return to Dvina with the "Kotik".

Say. 26 A glorious mountain. Monday. Krasnaya Syka comes up in the back ground, the same magnificent sight as always. Wish the photos may show at least a fraction of

(26) its beauty. How green and attractive do the trees look on the hills! And then the incomparable bay in which all this glory is reflected!

Grimberg mentions that there was an unusual mortality among the pups on Tschelij. Also that the yearlings were quite scarce. The skins taken were of good weight.

In the forenoon attended with Nalavovskie an auction of 5 or 6 sea otter skins. The auction was conducted by the ispravnik and his assistant in full uniform. The audience consisted of some of the merchants and nearly all the officers

(26) of the Jakut, of which
the captain purchased
one large skin and the
doctor another, somewhat
damaged one. For the good
skins the price ranged from
about 500 to 605 rubles
a piece.

By the kindness of
the chief engineer of the
At "Popovia" I had a
chance of changing plates
and was thus enabled to
make several exposures which
I hope may show some features
of the fine scenery which
surrounds us.

May 27 I set a couple of traps
Tuesday for mice and rats last
night and visited them this
morning, but not a single
one had been touched.

(27) Pottongue also asserts
that the smaller mammals
are now very rare and
that one has to go way into
the interior or into the
mountains to find either
Spilogale or Aechomys.
Waiting as we do for the
Company's answer from
Vladivostok before the
arrival of which we cannot
act, and also not yet
knowing whether we can
clear from this port without
having all the goods aboard
taken the risk on the island
it is impracticable to leave
the immediate vicinity of
the vessel.

In the afternoon made
several visits up-town, to
Sandelin, Mr. Party and finally

(27) the Russian doctor, Dr. who informed me that he had found two kinds of salamanders in Kamtschatka and one lizard. Upon probing the specimens I found that he had two adults and a number of very preserved larvae of the *Salamandella* *wormsnikeyi*, and that the lizard was only a dried up specimen of the same species. He promised me one of them.

Grinberg and I took a walk out to the cemetery which we found in a very dilapidated and disgraceful condition. In contrast to this I may in justice mention that the streets, especially the bridges

(27) and the plank sidewalks are
in better condition than 12
years ago. Grinberg in again
admitting to the mortality of
the pups on Tjelennij mentioned
that he had based his belief
that they had been killed
by the sikkatchi stepping on
them upon the fact that
the carcasses bodies were
very much flattened out, but
upon reflection he agreed
with me that the flattening
out of the body is rather
due to being walked over
by the numerous seals after
death, not before.

"Tjelennij" left in the evening.

May. 28 Rain and fog! This is
Wednesday very much as on the islands,
the roads very the same; nothing
can be done out of town.

- (28) Called on the "Kepanik" at the Quarantine and found him a pleasant although rather retired gentleman of few words. He has only been here a few weeks.
- Got one Microtus m. m. in a trap and skinned him.
- May 29 Weather fine, but can Thursday go nowhere except just round the vessel on account of the uncertainty of leaving due to the nonarrival of Mr. Grinnell's steamer. Under these circumstances I dare not go beyond land, especially since it is not even certain that the "Kepanik" will have to return here from the islands for her clearance.
- 574 Have been through the stores to see if I cannot

(29) pick up something Kamtchadal for the museum. There are a number of kuskas, shirts and mittens, but they are made by the Russians for the market and there is nothing aboriginal about them. It would be dangerous to bring them home as having any bearing on Kamtchadal ethnology, "I will not spend any money on that trash. On the whole, there will be precious little for the museum. The prices, besides, are enormous and are intended for the man-o'-war's men altogether.

Aug. 30 Still no steamer, but Friday. "Jenett" returned this morning after a cruise in the outer bay of some hours' duration

1301 Obtained the following
data from Capt. Lindquist
concerning the seal catch of
late years, which are in a
separate table.

To mice in the traps.
Spectable game broke
In the evening there
was an entertainment given
aboard to "Popkin" to which
over all were invited. The blue
jackets went through a very
creditable program of song,
music etc. which was very
much enjoyed. Said good by
to the Captain and officers
with thanks for their many
kindnesses as the "Popkin"
leaves the harbor tomorrow
morning.

Aug. 31 There being no chance
Saturday evg. in sight, Capt. Lind-
quist and I took a long
walk from which we did
not return until 4.30 pm.
We went first round the lake
and from its northern end
walked up to the top of
the second ridge in the
direction of Koniakskaja,
he armed with my camera
and tripod, I with my
gun. Hardly a bird was
seen on the whole trip
except a single Nicifaya
caryocatactes which
disappeared before I could
get within range. This
scarcity of birds is very
remarkable. Thus far I
have only observed: Em-

(31) *Oiga variabilis*; *Phyllospadix*
ovalis; *Creatlus pumilio*.
Parus kamtschatkensis; *Sitta*
albifrons; *Sorexilla kamtschatica*;
M. melanope; *M. abbreviatus*;
Cynips orientalis; *Pica Kamcha-*
tki, *Iocorhella sibirensis*;
L. curvirostra;

Stomoxys hyalinus had already

left upon my arrival.

The most interesting
part of the day's work was
the finding of obsidian
implements and chips at
an old village site at the
lake just where the road
to Saraglaskij turns up
toward the hills. They were
found, some on the surface
of the trail, some by digging
into the earth just under

the ten columns.

with narrow side spines
and the broadest with blunt,
wide spines. These two species
which I have measured are
the two extremes of a very
large series, about 30
which to my mind prove
conclusively that Tilden's
figure is entirely incorrect
and must be left ~~entirely~~
out of consideration.

In the evening shot a
short-eared bat.

Thorshavn, dark weather.
Capt. Lindquist gave me an account of the origin of showers

(1) off the Kommandors Islands
in recent years.

In 1891 the "Alert" signed
James Hamilton Lewis, American,
caught eight nests the
Santa Rosary, B. I. July 16, 11 pm.

In 1892 no less than
7 schooners were signed. The cruiser
"Fabriaka" signed 4, one American
and 3 British. "C H White" of
San Francisco, Victoria July 16 '92
11 pm between Copper and King I.

Willie McGowan was signed
next; in Petrop. July 28. Then
British Schooner "Ariel"; arrived
in Petrop. Aug. 6. - "Vancouver Belle"
was not seen by the "Kotka".

"Carmelite" ^{of Vancouver} was signed by
the admiral in the corvet "Vitiaz"
^{latter part of August}

The "Rodie Olsen" of Victoria
B.C. capt W. Krafc was signed
by Grunitski in the "Kotka" on

(A) July 26, 1892. The "Kotik" left
Nikitin Rookery at 1.30^{pm} for
Nikolofsky and at 2.20 pm
sighted the sledge in NW
about 8 miles distant. G.
ordered chase and he was
captured about 3.45 pm in
Lat. N. $55^{\circ} 23' 20''$, Long E. $167^{\circ} 27'$
and towed to Nikolofsky where
they arrived at 9 pm. On the
way 5 canoes with their crews
returning from the hunt were
picked up. A prize cow was
put on board, the sledge arrived
in Petropavlovsk Aug. 2.

The "Kotik" while in Glir-
ka, C.I., Aug. 21, 1892, sighted
a sledge at 1 pm to the
eastward. Gorbatchki ordered
chase; who left Glirka 1.40 and
got up to the vessel after making
12 miles $2\frac{1}{4}$ S from Glirka. She

(1) was found to be the "Maria" of Mainland, N.S., S. Balcarz
Capt. Only one boat, the
Capt., mate and 2 men were
on board, the remaining 21 of
the crew with 5 boats and one
sauve were out hunting. Fog
being or nothing could be seen
of them and the "Kotik" went in
search of them heading for S.E.
Cape. One boat was picked up
4 miles from the Cape, and
2-3 miles from the Cape, two
men boats. They all had seals
in the boats, 17 in all then.
Position of "Maria" when seized
Lat N $45^{\circ} 36'$, Long E $168^{\circ} 24'$.
The schooner picked up the other
boats during the night. She was
sent to Petropavloski in charge of
a prison crew, arriving Aug 28.
all the skins (except 1000 saved
by the government) were sold by auction
in Petropavloski; the money in Vladivostok

Sep. 2 Went with Lindquist to Monday. Saragaska in order to look for stone implements, but found none. Saragaska is a small village of a couple of hundred inhabitants about $3\frac{3}{4}$ verst w. of Petropavloski on Matela Bay. The place looked considerably cleaner and more prosperous than Petropavloski. Took a few 3 $\frac{1}{2}$ photos.

In the evening the dog Harry caught an arcticola but bit it so terribly that I despaired of being able to know it. As it is the only specimen of the species thus far obtained I went to work, however, at once to clean it and skin it, and in the hurry forgot to take any

(2) measurements. This must
be an "off" year for mice
as I have failed to get more
than one specimen in my
traps and my promise of
paying 20 kr. for each mouse
or bat brought in by the
boys has not resulted in
securing any.

This is the 25 years
anniversary of my in-
matriculation as student
at the Kristiania university.
Tonight all the old boys -
or as many of them as
are alive and have been
able to go to Kristiania
are together and my thoughts
and best wishes are with
them and the old country.

Sep. 3 Spent almost the whole Thursday forenoon trying to fix up the Auricola and succeeded in making a skin which will have to do in default of something better. Set 10 traps in the evening. Malavandki has finally got tired of waiting for Mr. Grinnell and his skins, and has decided to go to the island tomorrow in order to take the skins, returning to Petropavloski as soon as possible. I am glad of it, for this day in Petropavloski is within reach and call of the Frame is only wasting time, as there is no chance of collecting anything of interest, and while I may not be able to do much on the island on account of the hurry, yet I will have a chance to see North Roderick, B. I. once more.

In the afternoon took a

(3) walk with Lindquist and picked up a fine fragment of an abridian implement. It was found in the path at the southern end of the narrow strip of land which separates the lake- or lagoon - west of the town, from the bay.

Sep. 4 Not a single muror

Wednesday had been near the traps when I looked after them this morning.

Visited Dr. Tushhof who had just received from a man in the interior a bottle with specimens in alcohol, mostly insects. It also contained a Salamandrella and a Pitomyzon. Dr. T. collects them for the present governor in Aradys, who is somewhat of a naturalist,

(4) more particularly author
poterist from Murkva.
Received from the Capt
of the "Bakal" invitation for
tomorrow celebration of the
battle of Petropavloski Aug 24
1854.

Mr. Neelavanski stuck
to his determination to
go to the island and at
1.45 p.m. we started out of
Petropavloski harbor. Cloudy,
but clearing up outside.
Sea smooth. Met in the en-
trance to Amchka Bay the
four masts schooner Ethel
James, of San Francisco, loaded
with lumber for the new
light house.

Sep. 5
Thursday tremendous sea. Sick; in bed
all day. 1pm to.

Sep. 6 Do
Friday Do
Sep. 7 Do. do. Got up for upper
Saturday as weather is moderating somewhat.
Finally in sight of snow patches on
Bering Island.

According to Lindquist the
Alaska Commercial Co.'s lease expired
in February 1891, for which reason
it claimed and got the sealing
of the full catch 1890, some 5000
skins which the "Alexander"
received before May '91. The trans-
fer to the new company was effected
that summer. According to the new
contract the government retains
11 sets per skin, of which it pays
to the natives rb 1.50 per ^{unit} seal and
salting. The company has nothing to
do with the sealing except furnishing
the salt, as the government contract
is to deliver the skins at the ship's side.

Ogur
19 Aug. '95 o.s.

From	Moreschiobink	56
a	Ruf	706
"	Kidatmija	117
		<u>879.</u>

12 Aug. o.s.

From	Kishchobin	231
------	------------	-----

(17) A deposit is paid in St. Petersburg each year for the next year catch, formerly in 3000 skins, but this last year only in 15000. The government also undertakes to order all the goods to be sold in the stores. Some much less and emulsion. Seems a very bad arrangement.

Sep. 8 ^{arrived at Molochny 6.30 am.} Mr. J. seems to lay much "muday. Stress upon the capture of the last 2000 seals so late in the season as an argument in favor of the later arrival of the seals nowadays against a few years ago. But really, how much is there in it? Would anybody in reason maintain that it would have been impossible in former years of abundance to have "raked and scraped" the waters late in the season after the main catch of 5000 skins had been taken with a proportionate result? Formerly, the season closed early in August

(8)

with a not much of an array of
skins and nobody cared for anything
after that; but it is safe to assume
that at least 1000 seals were taken
skins could have been secured
in addition during the following
month, if a similar policy of
"scrapping" had then been pursued.
And so with the staginess of the
skins! The first signs of it in those
days was sufficient to stop further
sealing; now the stagey seals are
simply let go and ^{few} few
taken.

Very beautiful in them and
at the village, but high wind at
sea and in the mountains. Quite
apparent running aboard the "Pepin"
with the captain and officers.

590

Seals are now grading. On
Aug 19 o.s. 56 skins were
taken from Maroknik,
and now seals are reported
at Fintanka.

156

157

Leonard Stejneger
U.S. Fish Commission.

